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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,924	10/28/2003	Kazuhiro Hayashi	12219/40	3972

7590 02/08/2005  
John C. Altmiller, Esq.  
Kenyon & Kenyon  
Suite 700  
1500 K Street, N.W.  
Washington, DC 20005-1257

EXAMINER

AMARI, ALESSANDRO V

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/693,924

Applicant(s)

HAYASHI, KAZUHIRO

Examiner

Alessandro V. Amari

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Grosskopf US 6,252,717.

In regard to claim 1, Grosskopf teaches (see for example, Figures 1, 17) a transmission type illumination device for stereomicroscopes, at least comprising, in order from a light source (11), a collector lens (62), a diffuser (63) and a convex lens (52), wherein an optical element (53) having a periodical structure (53l) in a one-dimensional direction is located in the vicinity of a lens (13o, 13u) located nearest to a viewing surface side.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grosskopf US 6,252,717.

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Regarding claims 2 and 3, the structure of Grosskopf (see Fig. 1, 17) seems to satisfy condition (1) of claim 2 and a transmission type illumination system at least comprising in order from the light source (11), a collector lens (62) and a diffuser (63) and the angular aperture having the aspect ratio of claim 3. However, inasmuch as this is not explicitly taught, it would have been obvious to one having ordinary skill in the art at the time the invention was made to meet the condition and aspect ratio cited above, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. One would have been motivated to satisfy the conditions cited above for the purpose of improving the illumination properties of the microscope. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977)

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osa et al US 6,396,628 in view of Kaminsky et al US 6,636,363.

In regard to claim 1, Osa et al teaches (see for example, Fig. 36) a transmission type illumination device for stereomicroscopes, at least comprising, in order from a light source (80), a collector lens (82), a diffuser (83) and a convex lens (85), wherein an optical element (86) is located in the vicinity of a lens (91) located nearest to a viewing surface side (89).

However, in regard to claim 1, Osa et al does not teach the optical element having a periodical structure in a one-dimensional direction.

In regard to claim 1, Kaminsky et al teaches (see Figure 1) an optical element (12) having a periodical structure in a one-dimensional direction as shown in Figure 1 and as described in column 13, lines 25-30 and column 17, lines 24-27.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the optical element of Kaminsky et al in the illumination device of Osa et al in order to yield a homogeneously illuminated field of view.

6. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osa et al US 6,396,628 in view of Kaminsky et al US 6,636,363.

Regarding claims 2 and 3, the structure of Osa et al in view of Kaminsky et al seems to satisfy condition (1) of claim 2, a transmission type illumination system at least comprising in order from the a light source (80), a collector lens (82) and a diffuser (83), the angular aperture having the aspect ratio of claim 3. However, inasmuch as this is not explicitly taught, it would have been obvious to one having ordinary skill in the art at the time the invention was made to meet the condition and aspect ratio cited above, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. One would have been motivated to satisfy the conditions cited above for the purpose of improving the illumination properties of the microscope. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977)

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alessandro V. Amari whose telephone number is (571) 272-2306. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ava *all*  
26 January 2005

  
MARK A. ROBINSON  
PRIMARY EXAMINER